

Dalhousie University Neurosurgery

Resident Rotation Objectives: Adult Neurology

Introduction

Neurosurgery Residents rotate on the neurology services for a three month rotation. One month will be spent on general inpatient neurology and one month on the inpatient stroke service. Each rotation provides a unique experience, with the opportunity to diagnose and manage patients with a broad range of neurological disease. The following document outlines rotation specific objectives for the neurology rotations.

Experience in the EMG laboratory can be arranged upon request. This will provide an opportunity to review the PNS and consolidate knowledge concerning the usefulness of electrodiagnostic testing, with special consideration given to neurosurgical applications.

The specific goals for the Neurology rotation include:

1. To become familiar with the diagnosis, acute management, and principles of long term care of patients with a broad range of neurological disorders.
2. To know evidenced-based interventional strategies to reduce morbidity and mortality for a broad range of neurological diseases and their complications.
3. To understand the principles and clinical application of electrodiagnostic studies.
4. To develop and organized approach and methods of examination of central and peripheral nervous systems.
5. To become familiar with the roles of nursing, physiotherapy, occupational therapy, speech language pathology, psychology, social work, nutrition, rehabilitation and long term care services in the management of a broad range of neurological diseases.

Medical Expert

During this rotation the resident will demonstrate competency in their ability to:

1. Understand the normal anatomy and physiology of the nervous system.
2. Understand the pathology and pathophysiology of a broad range of neurologic disorders.
3. Identify the clinical features of a broad range of internal medicine and psychiatric disorders relevant to neurologic practice.

4. Identify the clinical features of the major neurologic disorders.
5. Perform a complete medical history, general physical examination and neurological examination.
6. Determine the anatomic localization of pathology responsible for the patient's presenting symptoms and signs.
7. Construct an appropriate provisional and differential diagnosis for the neuroanatomic localization and presenting clinical features.
8. Order the appropriate laboratory investigations to address the clinical entities suggested by the differential diagnoses.
9. Perform diagnostic procedures appropriate for general neurologic care (e.g. lumbar puncture).
10. Interpret investigation results, including EMG studies, recognizing the limitations of tests performed.
11. Identify and respond appropriately to neurologic emergencies.
12. Utilize consultation skills appropriate to the level of training, including the ability to determine the clinical problem and communicate appropriate recommendations for investigation, management and follow-up.

Communicator

1. Write a complete and accurate history, physical examination, differential diagnosis, plan of investigation, and treatment plan on the chart or dictate appropriate consultation letters.
2. Maintain accurate, complete, and legible progress notes in the chart.
3. Make clearly formulated consultation requests to other physicians.
4. Dictate succinct but complete discharge summaries that will be useful to the referring physician.
5. Communicate effectively and compassionately with the patient and family members.
6. Interact and communicate effectively with the nursing staff and other health professionals involved with the care of patients on the Neurology service.
7. Be able to describe the process of quality assurance and the role of morbidity/mortality rounds in improving care on the Neurology service.

8. Take instruction from more senior house staff and attending consultants on the service; at a more senior level the trainee will provide leadership, teaching, and will serve as a role model with respect to knowledge, skills, and attitudes for the junior house staff.

Collaborator

1. Understand the role of the physician and contribute in an effective manner to multidisciplinary team meetings.
2. Contribute in an effective manner to multidisciplinary team meetings.
3. Develop a management plan for patients that include consultation of appropriate medical and allied health care services.
4. Work with discharge planning services to ensure the transition to home is made as smoothly as possible. This will require knowledge of available community services, such as, Home Care Nova Scotia, outpatient occupational therapy and physiotherapy services.

Leader

1. Effectively manage their time.
2. Demonstrate timeliness in completion of duties (e.g. patient assessments, completion of discharge summaries, and completion of ITERS).
3. Demonstrate punctuality.
4. Demonstrate the ability to plan activities to accomplish multiple goals in a timely fashion.
5. Demonstrate a good balance between patient care needs, educational activities and outside activities.
6. Effectively allocate health care resources.
7. Demonstrate the ability to choose investigations and interventions that adhere to good standards of practice, with prioritization of management for the patients' needs.
8. Demonstrate the ability to coordinate the management plan for patients utilizing multiple members of the health care team.
9. Demonstrate the ability to effectively manage the activities of more junior house staff to further their education and contribution to the health care team.

10. Understand the roles of a variety of management activities not directly related to patient interactions
11. Understand the importance of office management procedures.
12. Understand the role of quality assurance activities.

Health Advocate

1. The resident will learn through weekly multidisciplinary rounds the appropriate circumstances for advocating use of a variety of inpatient and outpatient care services (e.g. physiotherapy, occupational therapy, speech therapy, dietician services, social work, Home Care Nova Scotia, Nova Scotia Pharmacare).
2. The resident will gain experience in the proper use of palliative care, including the palliative care service for care of patients with fatal neurological diseases (e.g. ALS, severe stroke, brain cancer, end stage MS, etc.).
3. The resident will develop skills in identifying important risk factors for neurological diseases and counselling patients in the appropriate response to risk factor identification. This may involve risk factor modification, such as counselling for smoking cessation, or risk factor understanding, such as understanding the implications of genetic disease identification.
4. The resident will understand and counsel patients about the role of disease oriented societies, such as the ALS society, Multiple Sclerosis society, etc.
5. The resident will understand the role of the Medical Section of the Driver's Review Board in maintaining safety standards on the road. The resident will understand their role in advocating for the patient and public through interactions with the Medical Section.

Scholar

1. Evaluate the medical literature utilizing critical appraisal techniques. This could be directed toward specific questions arising during clinical care, presentation at journal club or presentation at clinical teaching rounds.
2. Effectively participate in the education of more junior members of the health care team or allied health care professionals. Teaching may be at the bedside during clinical care, clinical skills learning sessions or in didactic educational sessions, such as clinical neurosciences rounds.
3. Demonstrate an adequate understanding of the principles of research and assess the quality of a research project.

Professional

1. Demonstrate a continuous improvement in the skills and knowledge necessary for the practice of neurology. This can be accomplished by participation in didactic and bedside educational activities.
2. Demonstrate insight into personal limitations and recognize when consultation is the most appropriate course of management.
3. Participate in self-assessment activities that evaluate the quality and ethical standard of patient care. This can be accomplished through patient care rounds with consultant neurologists and participation in Mortality and Morbidity review discussions.
4. Demonstrate personal and professional attitudes consistent with the consultant's role.